

IN THE CLAIMS

The presently pending claims are reproduced below for convenience:

Claim 1 (Original): An aqueous dispersion of a reactive size which comprises a cationic polymer comprising vinylamine units as a protective colloid, wherein the protective colloid comprises less than 0.0001% by weight, based on the protective colloid, of diketenes.

Claim 2 (Original): The aqueous dispersion according to claim 1, wherein the protective colloid is substantially free of diketenes.

Claim 3 (Previously Presented): The aqueous dispersion according to claim 1, which comprises less than 1% by weight, based on the aqueous dispersion, of a cationic starch.

Claim 4 (Original): The aqueous dispersion according to claim 3, which is substantially free of cationic starch.

Claim 5 (Previously Presented): The aqueous dispersion according to claim 1, wherein the cationic polymer comprising vinylamine units comprises from 1 to 100 mol% of hydrolyzed homo- or copolymers of N-vinylformamide.

Claim 6 (Previously Presented): The aqueous dispersion according to claim 1, wherein the cationic polymer comprising vinylamine units has an average molecular weight Mw of from 1000 to 2 million.

Claim 7 (Previously Presented): The aqueous dispersion according to claim 1, wherein the content of protective colloid is from 10 to 100% by weight, based on the reactive size.

Claim 8 (Previously Presented): The aqueous dispersion according to claim 1, wherein C₁₂- to C₂₂-alkylketene dimers, C₅- to C₂₂-alkyl- or C₅- to C₂₂-alkenylsuccinic anhydrides and/or C₁₂- to C₃₆-alkyl isocyanates are used as reactive sizes.

Claim 9 (Original): The aqueous dispersion according to claim 8, wherein the content of reactive size is from 1 to 50% by weight, based on the total weight of the dispersion.

Claim 10 (Previously Presented): A process for the preparation of an aqueous dispersion according to claim 1, comprising homogenizing the reactive size and the cationic polymer comprising vinylamine units in an aqueous mixture in the presence of an anionic dispersant at from 20 to 100°C under the action of shear forces.

Claim 11 (Previously Presented): A process for engine sizing paper, board and cardboard comprising adding an aqueous dispersion of claim 1 to an aqueous slurry of cellulose fibers and draining the paper stock.

Claim 12 (Previously Presented): A method of using an aqueous dispersion according to claim 1 as an engine size in the production of paper, board, cardboard and liquid packaging cardboard.

Claim 13 (Previously Presented): The aqueous dispersion according to claim 1, wherein the cationic polymer is a hydrolyzed poly-N-vinylformamide polymer having a K value of 75-110 and a degree of hydrolysis of 65-95 mol% of vinylamine units.

Claim 14 (Previously Presented): The aqueous dispersion of claim 13, wherein the reactive size is stearyldiketene.

Claim 15 (Previously Presented): The aqueous dispersion of claim 14, having a pH of 3.4-3.7.

Claim 16 (Previously Presented): The aqueous dispersion according to claim 14, further comprising calcium carbonate, and a cationic corn starch.

Claim 17 (Previously Presented): The aqueous dispersion according to claim 14, wherein the stearyldiketene is present in an amount of from 1 to 50% by weight.